**DOCKET NO.: ISIS-5315** 

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# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

C. Frank Bennett, et al.

**Application No.: 10/698,689** 

Filing Date: October 31, 2003

Confirmation No.: Not Yet Assigned

Group Art Unit: Not Yet Assigned

**Examiner: Not Yet Assigned** 

For: ANTISENSE MODULATION OF CD40 EXPRESSION

DATE OF DEPOSIT: December 12, 2003

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Dear Sir:

### INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 CFR § 1.56 and in accordance with 37 CFR §§ 1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 CFR § 1.56(b).

In accordance with § 1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified application, within three months of the date of entry into the national stage of the above identified application as set forth in § 1.491, before the mailing date

| of a first Office Act  | ion on the merits of the above-identified application, or           |  |  |  |  |  |
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| 1.97(e); and the subn  | nission fee of \$180.00 as set forth in § 1.17(p).                  |  |  |  |  |  |
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Copies of references listed on the attached Form PTO-1449 are enclosed herewith
 Copies of references listed on the attached Form PTO 1449 are not required to be submitted pursuant to the June 30, 2003 recent revisions to 37 CFR § 1.98(a)(2)(i).
 EXCEPT THAT:
 In view of the voluminous nature of references [list as appropriate], and the likelihood that these references are available to the Examiner,

copies are not enclosed herewith.

- In accordance with § 1.98(d), copies of the following references listed on the attached Form PTO-1449 are not enclosed herewith because they were previously cited by or submitted to the U.S. Patent and Trademark Office in patent application(s) for which a claim for priority under 35 U.S.C.§ 120 have been made in the instant application:
  - Copies of references 1-65, 75-282 and 306-315 listed on the attached Form PTO-1449 were previously cited by or submitted to the Patent and Trademark Office in prior Application No. 09/067,638, filed April 28, 1998; copies of references 66-74, 283-305 and 316-319 listed on the attached Form PTO-1449 were previously cited by or submitted to the Patent and Trademark Office in prior Application No. 10/261,382, filed September 30, 2002.

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| $\boxtimes$ | There are no listed referen          | ices which are not in the English | sh language.                  |
| Date:       | 12/11/03                             | John A. Ha                        | Haveln, J.                    |

Registration No. 42,637

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| Form P   | TO-  | 1449 Modified  | Docket No.<br>ISIS-5315         | Application No. 10/698,689  |  |  |
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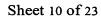




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| For  | rm PT | O-1449 Modifi                         | ed          | Docket No. Application No. 1SIS-5315 10/698,689 |                 |                        | ·        |  |
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| List of Patent and Publications Cited by Applicant (Use several sheets if necessary) |       |                                       |             | Applicant C. Frank Bennett, et al.              |                 |                        |          |  |
|  |       | rtment of Commer<br>d Trademark Offic |             | Filing Date<br>October 31, 2003                 | Group<br>Not Ye | Group Not Yet Assigned |          |  |
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|  |       | · U                                   | . S. PATENT | DOCUMENTS                                       |                 |                        |          |  |
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|  | 75    | 3,687,808                             | 08/29/72    | Merigan   |                 | 195                    | 28       |  |
|  | 76    | 4,469,863                             | 09/04/84    | Ts'o et al.                                     |                 | 536                    | 27       |  |
|  | 77    | 4,476,301                             | 10/09/84    | Imbach et al.                                   |                 | 536                    | 27       |  |
|  | 78    | 4,587,044                             | 05/06/86    | Miller et al.                                   |                 | 530                    | 211      |  |
|  | 79    | 4,605,735                             | 08/12/86    | Miyoshi et al.                                  |                 | 536                    | 27       |  |
|  | 80    | 4,667,025                             | 05/19/87    | Miyoshi et al.                                  |                 | 536                    | 27       |  |
|  | 81    | 4,762,779                             | 08/09/88    | Snitman   |                 | 435                    | 6        |  |
|  | 82    | 4,789,737                             | 12/06/88    | Miyoshi et al.                                  |                 | 536                    | 27       |  |
|  | 83    | 4,800,159                             | 01/24/08    | Mullis, et al.                                  |                 | 435                    | 172.3    |  |
|  | 84    | 4,806,463                             | 02/21/89    | Goodchild et al.                                |                 | 435                    | 5        |  |
|  | 85    | 4,824,941                             | 04/25/89    | Gordon et al.                                   |                 | 530                    | 403      |  |
|  | 86    | 4,828,979                             | 05/09/89    | Klevan et al.                                   |                 | 435                    | 6        |  |
|  | 87    | 4,835,263                             | 05/30/89    | Nguyen et al.                                   |                 | 536                    | 27       |  |
|  | 88    | 4,845,205                             | 07/04/89    | Huynh Dinh et al.                               |                 | 536                    | 28       |  |
|  | 89    | 4,876,335                             | 10/24/89    | Yammane et al.                                  |                 | 536                    | 27       |  |
|  | 90    | 4,904,582                             | 02/27/90    | Tullis  |                 | 435                    | 6        |  |
|  | 91    | 4,948,882                             | 08/14/90    | Ruth  |                 | 536                    | 27       |  |
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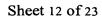


| Fo                  | rm PT  | O-1449 Modified                          | d         | Docket No. Application No. 1SIS-5315 10/698,689 |                                    |       |          |  |
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|                     | List of Patent and Publications Cited by Applicant (Use several sheets if necessary) |  |           |   | Applicant C. Frank Bennett, et al. |       |          |  |
|                     |  | rtment of Commerce<br>d Trademark Office | •         | Filing Date<br>October 31, 2003                 | Group Not Yet Assigned             |       |          |  |
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|                     | 92   | 4,958,013                                | 09/18/90  | Letsinger                                       |                                    | 536   | 27       |  |
|                     | 93   | 4,981,957                                | 01/01/91  | Lebleu et al.                                   |                                    | 536   | 27       |  |
|                     | 94   | 5,013,830                                | 05/07/91  | Ohtsuka et al.                                  |                                    | 536   | 27       |  |
|                     | 95   | 5,023,243                                | 06/11/91  | Tullis  |                                    | 514   | 44       |  |
|                     | 96   | 5,034,506                                | 07/23/91  | Summerton et al.                                |                                    | 528   | 391      |  |
|                     | 97   | 5,082,830                                | 01/21/92  | Brakel et al.                                   |                                    | 514   | 44       |  |
|                     | 98   | 5,109,124                                | 04/28/92  | Ramachandran et al                              | •                                  | 536   | 27       |  |
|                     | 99   | 5,112,963                                | 05/12/92  | Pieles et al.                                   |                                    | 536   | 27       |  |
|                     | 100  | 5,118,800                                | 06/02/92  | Smith et al.                                    | ·                                  | 536   | 23       |  |
|                     | 101  | 5,118,802                                | 06/02/92  | Smith et al.                                    |                                    | 536   | 27       |  |
|                     | 102  | 5,130,302                                | 12/24/91  | Neustadt  |                                    | 514   | 211      |  |
|                     | 103  | 5,134,066                                | 07/28/92  | Rogers et al.                                   |                                    | 435   | 91       |  |
|                     | 104  | 5,138,045                                | 08/11/92  | Cook et al.                                     |                                    | 536   | 27       |  |
|                     | 105  | 5,149,797                                | 09/22/92  | Pederson et al.                                 |                                    | 536   | 27       |  |
|                     | 106  | 5,166,315                                | 11/24/92  | Summerton et al.                                |                                    | 528   | 406      |  |
|                     | 107  | 5,175,273                                | 12/29/92  | Bischofberger et al.                            |                                    | 536   | 27       |  |
|                     | 108  | 5,177,196                                | 01/05/93  | Meyer, Jr. et al.                               |                                    | 536   | 22.1     |  |
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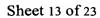


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|                     | Cite | ent and Publications<br>d by Applicant<br>al sheets if necessary |           | Applicant C. Frank Bennett, et al.   |                           |           |          |
|                     |      | rtment of Commerce<br>d Trademark Office                         | :         | Filing Date<br>October 31, 2003      | Group<br>Not Yet Assigned |           |          |
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|                     | 109  | 5,177,198  | 01/05/93  | Spielvogel et al.                    |                           | 536       | 25.33    |
|                     | 110  | 5,185,444  | 02/09/93  | Summerton et al.                     |                           | 544       | 81       |
| -                   | 111  | 5,188,897  | 02/23/93  | Suhadolnik et al.                    |                           | 428       | 402.2    |
|                     | 112  | 5,214,134  | 05/25/93  | Weis et al.                          |                           | 536       | 25.3     |
|                     | 113  | 5,214,136  | 05/25/93  | Lin et al.                           |                           | 514       | 44       |
|                     | 114  | 5,216,141  | 06/01/93  | Benner                               |                           | 536       | 27.13    |
|                     | 115  | 5,218,105  | 06/08/93  | Cook et al.                          |                           | 536       | 25.31    |
|                     | 116  | 5,220,007  | 06/15/93  | Pederson et al.                      |                           | 536       | 23.1     |
|                     | 117  | 5,223,618  | 06/29/93  | Cook et al.                          |                           | 544       | 276      |
|                     | 118  | 5,235,033  | 08/10/93  | Summerton et al.                     |                           | 528       | 391      |
|                     | 119  | 5,245,022  | 09/14/93  | Weis et al.                          |                           | 536       | 24.5     |
|                     | 120  | 5,254,469  | 10/19/93  | Warren, III et al.                   |                           | 435       | 188      |
|                     | 121  | 5,256,775  | 10/26/93  | Froehler                             |                           | 536       | 25.6     |
|                     | 122  | 5,258,506  | 11/02/93  | Urdea et al.                         |                           | 536       | 23.1     |
|                     | 123  | 5,262,536  | 11/16/93  | Hobbs, Jr.                           |                           | 546       | 25       |
|                     | 124  | 5,264,423  | 11/23/93  | Cohen et al.                         |                           | 514       | 44       |
|                     | 125  | 5,264,562  | 11/23/93  | Matteucci                            |                           | 536       | 23.1     |
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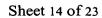


| Fo                  | rm PT | O-1449 Modifi  | ed          | Docket No.<br>ISIS-5315                             | Application No. 10/698,689 |       |          |
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|                     | Cite  | tent and Publication d by Applicant al sheets if necessa |             | Applicant C. Frank Bennett, et al.                  |                            |       |          |
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|                     | 126   | 5,264,564  | 11/23/93    | Matteucci   |                            | 536   | 23.1     |
|                     | 127   | 5,272,250  | 12/21/93    | Spielvogel et al.                                   |                            | 530   | 300      |
|                     | 128   | 5,276,019  | 01/04/94    | Cohen et al.  |                            | 514   | 44       |
|                     | 129   | 5,278,302  | 01/11/94    | Caruthers et al.                                    |                            | 536   | 24.5     |
|                     | 130   | 5,286,717  | 02/15/94    | Cohen et al.  |                            | 514   | 44       |
|                     | 131   | 5,292,873  | 03/08/94    | Rokita et al.                                       |                            | 536   | 24.3     |
|                     | 132   | 5,317,098  | 05/31/94    | Shizuya et al.                                      |                            | 536   | 23.1     |
|                     | 133   | 5,319,080  | 06/07/94    | Leumann   |                            | 536   | 27.1     |
|                     | 134   | 5,321,131  | 06/14/94    | Agrawal et al.                                      |                            | 536   | 25.34    |
|                     | 135   | 5,352,775  | 10/04/94    | Albertsen, et al.                                   |                            | 536   | 23.1     |
| -                   | 136   | 5,359,044  | 10/25/94    | Cook et al.   |                            | 536   | 23.1     |
|                     | 137   | 5,366,878  | 11/22/94    | Pederson et al.                                     |                            | 435   | 91.3     |
|                     | 138   | 5,367,066  | 11/22/94    | Urdea et al.  |                            | 536   | 24.3     |
|                     | 139   | 5,371,241  | 12/06/94    | Brush   | -                          | 549   | 220      |
|                     | 140   | 5,378,825  | 01/03/95    | Cook et al.   |                            | 536   | 25.34    |
|                     | 141   | 5,386,023  | 01/31/95    | Sanghvi et al.                                      |                            | 536   | 25.3     |
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|                     | Cite  | tent and Publication<br>d by Applicant<br>al sheets if necessar |           | Applicant C. Frank Bennett, et al.                  |     |           |          |
|                     |       | rtment of Commerc<br>d Trademark Office                         |           | Filing Date Group October 31, 2003 Not Yet Assigned |     |           |          |
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|                     | 142   | 5,391,723   | 02/21/95  | Priest  |     | 536       | 23.1     |
|                     | 143   | 5,393,878   | 02/28/95  | Leumann   |     | 536       | 28.2     |
|                     | 144   | 5,399,676   | 03/21/95  | Froehler  |     | 536       | 23.1     |
|                     | 145   | 5,403,711   | 04/04/95  | Walder et al.                                       |     | 435       | 6        |
|                     | 146   | 5,405,938   | 04/11/95  | Summerton et al.                                    |     | 528       | 406      |
| ,                   | 147   | 5,405,939   | 04/11/95  | Suhadolnik et al.                                   |     | 530       | 322      |
|                     | 148   | 5,407,794   | 04/1995   | Cuting, et al.                                      |     | 435       | 6        |
|                     | 149   | 5,414,077   | 05/09/95  | Lin et al.  |     | 536       | 24.3     |
|                     | 150   | 5,416,203   | 05/16/95  | Letsinger   |     | 536       | 25.34    |
|                     | 151   | 5,432,272   | 07/11/95  | Benner  |     | 536       | 25.3     |
|                     | 152   | 5,434,257   | 08/18/95  | Matteucci et al.                                    |     | 536       | 24.3     |
|                     | 153   | 5,436,327   | 07/25/95  | Southern et al.                                     |     | 536       | 25.34    |
|                     | 154   | 5,446,137   | 08/29/95  | Maag et al.   |     | 536       | 23.1     |
|                     | 155   | 5,451,463   | 09/19/95  | Nelson et al.                                       |     | 428       | 402      |
|                     | 156   | 5,453,496   | 09/26/95  | Caruthers et al.                                    |     | 536       | 24.5     |
| ·                   | 157   | 5,455,233   | 10/03/95  | Spielvogel et al.                                   |     | 514       | 44       |
|                     | 158   | 5,457,187   | 10/10/95  | Gmeiner et al.                                      |     | 536       | 25.5     |
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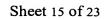




| Form PTO-1449 Modified   | Docket No.<br>ISIS-5315              | Application No. 10/698,689 |
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| List of Patent and Publications Cited by Applicant (Use several sheets if necessary) | Applicant C. Frank Bennett, et       | t al.                      |
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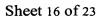
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|                     | 159 | 5,459,255       | 10/17/95 | Cook et al.        | 536   | 27.13    |
|                     | 160 | 5,463,564       | 10/31/95 | Agrafiotis, et al. | 364   | 496      |
|                     | 161 | 5,463,567       | 10/31/95 | Rice               | 375   | 200      |
|                     | 162 | 5,466,677       | 11/14/95 | Baxter et al.      | 514   | 44       |
|                     | 163 | 5,466,786       | 11/14/95 | Buhr et al.        | 536   | 26.26    |
|                     | 164 | 5,470,967       | 11/28/95 | Huie et al.        | 536   | 24.3     |
|                     | 165 | 5,472,672       | 12/05/95 | Brennan            | 422   | 131      |
|                     | 166 | 5,476,925       | 12/19/95 | Letsinger et al.   | 536   | 23.1     |
|                     | 167 | 5,484,908       | 01/16/96 | Froehler et al.    | 536   | 24.31    |
|                     | 168 | 5,486,603       | 06/23/96 | Buhr               | 536   | 24.3     |
|                     | 169 | 5,489,677       | 02/06/96 | Sanghvi et al.     | 536   | 22.1     |
|                     | 170 | 5,491,133       | 02/13/96 | Walder et al.      | 514   | 44       |
|                     | 171 | 5,502,177       | 03/26/96 | Matteucci et al.   | 536   | 26.6     |
|                     | 172 | 5,507,796       | 04/16/96 | Hasson             | 606   | 148      |
|                     | 173 | 5,508,270       | 04/16/96 | Baxter et al.      | 514   | 47       |
|                     | 174 | 5,510,475       | 04/23/96 | Agrawal et al.     | 536   | 24.3     |
|                     | 175 | 5,512,439       | 04/30/96 | Hornes et al.      | 435   | 6        |
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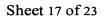


| Fo                  | rm PT   | O-1449 Modified   | d         | Docket No.<br>ISIS-5315              |                        | Application No. 10/698,689 |          |  |
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|                     | 177   | 5,514,785   | 05/07/96  | Van Ness et al.                      |                        | 536                        | 22.1     |  |
|                     | 178   | 5,519,126   | 05/21/96  | Hecht                                |                        | 536                        | 24.3     |  |
|                     | 179   | 5,519,134   | 05/21/96  | Acevedo et al.                       |                        | 544                        | 243      |  |
|                     | 180   | 5,523,389   | 06/04/96  | Ecker et al.                         |                        | 536                        | 23.1     |  |
|                     | 181   | 5,525,465   | 06/11/96  | Haralambidis et al.                  |                        | 435                        | 6        |  |
|                     | 182   | 5,525,711   | 06/11/96  | Hawkins et al.                       |                        | 536                        | 22.1     |  |
|                     | 183   | 5,529,756   | 06/25/96  | Brennan                              |                        | 422                        | 131      |  |
|                     | 184   | 5,536,821   | 07/16/96  | Agrawal et al.                       |                        | 536                        | 22.1     |  |
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|                     | 186   | 5,541,306   | 07/30/96  | Agrawal et al.                       |                        | 536                        | 22.1     |  |
| 3                   | 187   | 5,541,313   | 07/30/96  | Ruth                                 |                        | 536                        | 24.3     |  |
|                     | 188   | 5,541,307   | 07/30/96  | Cook et al.                          |                        | 536                        | 23.1     |  |
|                     | 189   | 5,543,508   | 08/06/96  | Haseloff et al.                      |                        | 536                        | 23.2     |  |
|                     | 190   | 5,545,730   | 08/13/96  | Urdea et al.                         |                        | 536                        | 28.51    |  |
|                     | 191   | 5,550,111   | 08/27/96  | Suhadolnik et al.                    |                        | 514                        | 44       |  |
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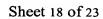


| Fo                  | rm PT | O-1449 Modifie  | d         | Docket No.<br>ISIS-5315                             | Applica<br>10/698 | ation No.<br>,689 |          |
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|                     | 192   | 5,552,538   | 09/03/96  | Urdea et al.  |                   | 536               | 24.3     |
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|                     | 196   | 5,563,036   | 10/08/96  | Peterson et al.                                     |                   | 435               | 6        |
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|                     | 198   | 5,565,350   | 10/15/96  | Kmiec   |                   | 435               | 172.3    |
|                     | 199   | 5,565,552   | 10/15/96  | Magda et al.  |                   | 534               | 11       |
|                     | 200   | 5,567,810   | 10/22/96  | Weis et al.   |                   | 536               | 25.3     |
|                     | 201   | 5,567,811   | 10/22/96  | Misiura et al.                                      |                   | 536               | 25.34    |
|                     | 202   | 5,571,799   | 11/05/96  | Tkachuk et al.                                      |                   | 514               | 47       |
|                     | 2-3   | 5,574,142   | 11/12/96  | Meyer, Jr. et al.                                   |                   | 536               | 23.1     |
|                     | 204   | 5,574,656   | 11/12/96  | Agrafiotis, et al.                                  |                   | 364               | 500      |
|                     | 205   | 5,576,427   | 11/19/96  | Cook et al.   |                   | 536               | 23.1     |
| -                   | 206   | 5,578,717   | 11/26/96  | Urdea et al.  |                   | 536               | 26.1     |
|                     | 207   | 5,578,718   | 11/26/96  | Cook et al.   |                   | 536               | 27.21    |
|                     | 208   | 5,580,731   | 12/03/96  | Chang et al.  |                   | 435               | 6        |
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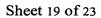


| For                        | m PT     | O-1449 Modified   | 1        | Docket No.<br>ISIS-5315              | Applica<br>10/698,        | ation No.<br>,689 |       |
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|                            | Cite     | tent and Publications<br>d by Applicant<br>al sheets if necessary |          | Applicant C. Frank Bennett, et al.   |                           |                   |       |
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| -                          | 210      | 5,587,361   | 12/24/96 | Cook et al.                          |                           | 514               | 44    |
|                            | 211      | 5,587,371   | 12/24/96 | Sessler et al.                       |                           | 514               | 185   |
|                            | 212      | 5,587,469   | 12/24/96 | Cook et al.                          |                           | 536               | 23.1  |
|                            | 213      | 5,591,584   | 01/07/97 | Chang et al.                         |                           | 435               | 6     |
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|                            | 215      | 5,594,121   | 01/14/97 | Froehler et al.                      |                           | 536               | 23.5  |
|                            | 216      | 5,595,726   | 01/21/97 | Magda et al.                         |                           | 424               | 9.61  |
|                            | 217      | 5,596,086   | 01/21/97 | Matteucci et al.                     |                           | 536               | 22.1  |
|                            | 218      | 5,596,091   | 01/21/97 | Switzer                              |                           | 536               | 24.5  |
|                            | 219      | 5,597,696   | 01/28/97 | Linn et al.                          | -                         | 435               | 6     |
|                            | 220      | 5,597,909   | 01/28/97 | Urdea et al.                         |                           | 536               | 24.3  |
|                            | 221      | 5,599,923   | 02/04/97 | Sessler et al.                       |                           | 540               | 145   |
|                            | 222      | 5,599,928   | 02/04/97 | Hemmi et al.                         |                           | 540               | 474   |
|                            | 223      | 5,602,240   | 02/11/97 | De Mesmaeker et al                   | •                         | 536               | 23.1  |
|                            | 224      | 5,608,046   | 03/04/97 | Cook et al.                          |                           | 536               | 23.1  |
|                            | 225      | 5,610,289   | 03/11/97 | Cook et al.                          |                           | 536               | 25.34 |
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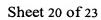


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|                     | 227  | 5,612,455   | 03/18/97  | Hoey                                 |                        | 530               | 350      |
|                     | 228  | 5,614,617   | 03/25/97  | Cook et al.                          |                        | 536               | 23.1     |
|                     | 229  | 5,618,704   | 04/08/97  | Sanghvi et al.                       |                        | 435               | 91.5     |
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|                     | 232  | 5,625,050   | 04/29/97  | Beaton et al.                        |                        | 536               | 24.1     |
|                     | 233  | 5,627,053   | 05/06/97  | Usman et al.                         |                        | 435               | 91.1     |
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|                     | 235  | 5,639,603   | 06/17/97  | Dower, et al.                        |                        | 435               | 6        |
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|                     | 238  | 5,650,122   | 07/22/97  | Harris, et al.                       |                        | 422               | 81       |
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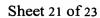


| For                 | rm PT | O-1449 Modified   | d         | Docket No.<br>ISIS-5315              | Applica<br>10/698         | ation No. |          |
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|                     | 256   | 5,714,331   | 02/03/98  | Buchardt et al.                      |                           | 435       | 6        |
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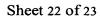


| For                 | m PT | O-1449 Modified   | ì         | Docket No.<br>ISIS-5315            | Applica<br>10/698,        | ation No.<br>,689 |          |
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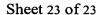


| Fo                  | rm PT | O-1449 Modifie  | d         | Docket No.<br>ISIS-5315                             | Applica<br>10/698, | ation No.<br>,689 |          |
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**Applicant** 

C. Frank Bennett, et al.

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